



MIT IDEAS Competition

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Press Release
May 1, 2005

Winners of the 4th annual MIT IDEAS Competition announced

The winners of the fourth annual MIT IDEAS Competition were announced at the April 28 Awards Ceremony at MIT. The competition, a joint project of the MIT Public Service Center and the Edgerton Center, encourages and celebrates innovations that benefit communities worldwide. IDEAS winners use the award funds to implement the projects they develop, often leveraging additional resources to expand the benefits to the communities they serve. Find out more at <http://web.mit.edu/ideas>

A **\$5,000 Award** sponsored by Lemelson-MIT was presented to the “Bicilavadora” team, who developed a pedal-powered washing machine to be manufactured by MayaPedal, a Guatemalan non-profit organization. The machine could enable women in poor communities to get back the eight hours a week they typically spend hand-washing clothes.

The team members are Radu Raduta, a senior in Aeronautics and Astronautics from Timisoara, Romania; Jessica Vechakul, a senior in Mechanical Engineering from New York, NY; Teresa Baker, a first year grad student in Mechanical Engineering; Stephanie Dalquist, a master’s student in Technology and Policy; Alexander Yip a graduate student in EECS from Massapequa, NY; and Kimberley Harrison, a sophomore in Mechanical Engineering.

Another **\$5,000 Award** (sponsored by the Boeing Company) went to the “Robopsy” team for their robotic device for performing minimally invasive biopsies. The team have collaborated with doctors at MGH on the device, and hope that by making biopsies faster they can reduce the radiation exposure of both patients and doctors, while also decreasing the likelihood of lung collapse for patients.

The team members are Conor James Walsh, a graduate student in Mechanical Engineering, from Dublin, Ireland; Nevan Hanumara, a graduate student in the Newman Laboratory for Biomechanics, from Kingston, RI; and Steven Barrett, an undergraduate from Cambridge University who is enrolled in the Cambridge-MIT Exchange program.

A **\$3,000 Award** sponsored by the MIT Graduate Students’ Office goes to a team of graduate students, “Mozambique Environmental Sanitation Initiative”. They are developing a new set of planning tools to promote hygienic sanitation practices in Maputo, Mozambique, and to raise awareness of the links between flooding, sanitation, hygiene, and health.

The team members are Ella Lazarte, Valentiana Zuin, Monica Romis, Gabriele Kruks-Wisner, Anna Brown, and Jighar Bhatt, all Masters students in Planning and International Development; Pragnya Alekal, and Brian Robinson, Masters students in Environmental Engineering; and Basilia Yao, who is a dual degree candidate, pursuing a Masters in City Planning from MIT and an MBA from Harvard Business School. They were mentored by Prof. Jennifer Davis of DUSP.

Another **\$3,000 Award** (sponsored by Lemelson-MIT) was presented to the “VacPac” team, who have designed and built a refrigerated backpack for preserving vaccines and transporting them to clinics in remote locations. Currently, many expensive vaccines go to waste in developing countries because they cannot be kept at the correct temperature while being transported. VacPac is an affordable solution to the problem.

The VacPac team are all seniors in Mechanical Engineering. They are Ethan Crumlin, from Worcester, MA; Geoff Baker, (taking a dual degree in Mechanical Engineering and Brain and Cognitive Sciences), from Coral Springs, FL; Amy Wong, from Brooklyn, NY; and Emily Smith, from Des Moines, IA.

Lemelson-MIT also sponsored a **\$2,000 Award** that went to the “Parabolic Power” team. In 2004, members of this team won an IDEAS Award for a solar energy concentrator, which they built and implemented in Lesotho. This new award is for a project to connect the solar collector to an innovative steam engine that will produce off-grid electricity for the community.

The team members are Matt Orosz, a graduate student in the Technology and Policy program, from Bridgewater, MA; Headley Jacobus, a senior in Mechanical Engineering, from Mendham, NJ; Toni Ferreira, a senior in Mechanical Engineering, from Chicopee, MA; and Amy Mueller, a CEE Masters student from Mequon.

The John and Rhoda Baruch Fund supported two awards for teams in which at least half the students are MIT undergraduates. One **\$2,000 IDEAS Baruch Award** went to “MANTRA II”. This team designed an internet-based system for providing medical triaging services to patients in rural areas of India. In many areas of India where there are no medical facilities villagers do have access to government-sponsored internet kiosks. Triage surveys can be accessed from these kiosks and submitted to doctors in urban areas who make arrangements for the necessary care.

The team members are Nupur Garg, a sophomore in Chemical Engineering, and her brother, Saumaya Garg, a student at Washington University. Nupur and Saumaya are from Pensacola Florida.

The other **\$2,000 IDEAS Baruch Award** was presented to the “Solar Water Disinfection Device” team. This team has adapted existing systems that use the sun’s heat and UV radiation to disinfect water. Current systems generally use old soda bottles, but these are not available everywhere, and are expensive to transport in bulk. The new product is an inexpensive but rugged bag that can be produced locally and adapted to local needs.

The team members are Anna Bershteyn, junior in Materials Science and Engineering, from Cupertino, CA; Eunmee Yang, a sophomore in Biology, from Falls Church, VA; Xanat Flores, a PhD student in Environmental Engineering (and also an IDEAS winner in 2003); Ed Hseih, a senior in Mechanical Engineering, from Scarsdale, NY; and Alfinio Flores, a Social Studies undergraduate at Harvard University, from Phoenix, AZ.

Finally, the IDEAS Competition sponsored a **\$2,000 Award** for the Wider Reach team, who designed a cell phone service that gives farmers in Bangladesh direct access to market prices for their goods. The system is designed so that illiterate farmers can use all the features, and makes use of the successful cell phone network that Grameen Phone established in poor communities across Bangladesh.

Wider Reach are Brian Roughan, from Cambridge, MA; Armina Karapetyan from Moscow, Russia; Kamal Quadir from Dhaka, Bangladesh; Justin Cook from Eugene, OR; and Joe Zeff, from West Bloomfield, MI - all Sloan MBA students; with Jose Espinosa, a graduate student in the Media Lab, from Mexico City, Mexico.

The IDEAS Competition also receives funding support from the Ford-MIT Alliance, Hewlett-Packard, Bose, and the Silicon Spice Founders Fund.